

REMARKS

Claims 1-20 remain in this application. Independent claims 1 and 12 have been amended herein for further consideration in light of the decision of the Board of Patent Appeals and Interferences affirming the rejection of claims 1, 2, 12 and 13 under 35 U.S.C. § 103. Claims 10 and 11 stand allowed, and claims 3-9 and 14-20 stand objected to as depending from a rejected base claim but otherwise are indicated to be directed to allowable subject matter.

Reconsideration of this application is requested in view of the amendment to claims 1 and 12. In particular, claims 1 and 12 now explicitly recite a device and method of performing detection of interference waves that is carried out by a base station of a wireless communication system. Yoshimi (U.S. Patent No. 5,603,093 of record) neither discloses nor suggests such a device or method.

The invention as claimed provides significant advantages over the method proposed by Yoshimi. In particular, when an interference wave occurs in the same frequency band as the downlink channel signal that is transmitted from the base station to the mobile communication terminal, it becomes necessary to change the frequency band of the downlink signal. According to the teaching of Yoshimi, as previously explained, interference waves are detected on the mobile communication terminal side. Therefore, when such an interference wave is detected, an additional operation of transmitting from the mobile communication terminal to the base station a request for changing the frequency band of the downlink signal is required according to Yoshimi.

Further, when the proposed new frequency band requested by the mobile communication terminal is already being used by other mobile communication terminals within the region covered by the base station, it is necessary to transmit yet another request from the mobile communication terminal to the base station.

In contrast, according to the invention as now unquestionably set forth in claims 1 and 12, the interference waves are detected in the base station itself. Accordingly, the base station actively changes the frequency band of the downlink signal to the mobile communication terminal, and because the base station already has knowledge of the frequency bands of downlink signals being used by other mobile communication terminals in the region, the frequency band change has to be performed only once upon detection of an interference wave.

As previously explained, Yoshimi does not suggest that the prior art method of using a dedicated measurement device to measure interference waves in a zone covered by a base station, while the base station is stopped from transmitting radio waves, is a possible, albeit unpreferred, embodiment of the Yoshimi invention. To the contrary, Yoshimi states that the prior art method sometimes leaves a region of an undesired state of reception in the zone (col. 2, ll. 18-20), and further that mobile radio communication service is impaired during the measurement (col. 2, ll. 21-25). As such, Yoshimi clearly does teach away from using the conventional prior art method of interference wave detection using a dedicated measurement device, as discussed in columns 1 and 2 of that reference.

The Board decision on rehearing stated that Yoshimi does not teach away from the proposed combination of the prior art method with the acknowledged prior art of Fig. 11 of the present application, because “[a]ll of the disclosures in a reference ‘must be evaluated for what they fairly teach one of ordinary skill in the art.’ In re Boe, 355 F.2d 961, 965, 148 USPQ 507, 510 (CCPA 1966). Yoshimi’s discussion of the prior art is part of the disclosure. The fact that the prior art method may have problems does not constitute a teaching away.” Decision on Request for Rehearing at 3, emphasis added.

The Board did not rely on any legal precedent to support its conclusion that a discussion in a reference of problems with the prior art and a proposal by the reference of a solution that overcomes those problems, does not constitute a teaching away. To the contrary, it is submitted that such a situation represents a paradigm example of a “teaching away” as established by the controlling case law.

In view of the teaching of Yoshimi that the prior art method sometimes leaves a region of an undesired state of reception in the zone (col. 2, ll. 18-20), and further that mobile radio communication service is impaired during the measurement (col. 2, ll. 21-25), and that Yoshimi teaches that detection of interference waves should be performed instead by a mobile communication terminal, a person of ordinary skill in the art would not have attempted to use such prior art method to modify the system of Fig. 11 of the application, but would be led by Yoshimi in a direction divergent from the path that was taken by the applicant. See In re Gurley, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994).

While the Board acknowledged Yoshimi's discussion of the disadvantages of use of the prior art method (Decision at 5), the Board adopted an improper standard that the reference must show that the prior art method "does not work" in order for the reference to be found to teach away from the claimed invention. To the contrary, the case law requires only that a person of ordinary skill in the art be discouraged from making the proposed combination that is the claimed invention. In re Gurley, supra.

Conclusion

In view of the foregoing amendments and discussion, it is respectfully submitted that claims 1-20 pending in this application are patentable over Yoshimi and all other prior art of record. Favorable reconsideration and the issuance of a Notice of Allowance are earnestly solicited.

Please charge any fee or credit any overpayment pursuant to 37 CFR 1.16 or 1.17 to Deposit Account No. 02-2135.

Respectfully submitted,

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